

Claims

1. A method for maturation of conifer somatic embryos, comprising
 - 5 a step, where an embryogenic cell mass is cultured with a culture medium comprising an anti-auxin.
 2. A method according to claim 1, further comprising a second step before the anti-auxin step, where the embryogenic cell mass is cultured with a culture medium.
 - 10 3. A method according to claim 1, further comprising a third step after the anti-auxin step where the embryogenic cell mass is cultured with a culture medium essentially free of anti-auxin.
 - 15 4. A method according to claim 1, whereby the anti-auxin step lasts from 2 days to 50 weeks.
 5. A method according to claim 2, whereby the second step before the anti-auxin step lasts from two days to 10 weeks.
 - 20 6. A method according to claim 3, whereby the third step after the anti-auxin step lasts from two days to 40 weeks.
 - 25 7. A method according to any of the preceding claims, whereby the culture medium in at least one of the steps further comprises a maturation agent.
 8. A method according to claim 7, whereby the culture medium of all the steps further comprises at least one maturation agent.
 - 30 9. A method according to claim 7, whereby the maturation agent is selected from the group comprising abscisic acid, silver nitrate, jasmonic acid, abscisyl alcohol, acetylenic aldehyde, dihydroacetylenic alcohol, phaseic acid, dihydrophaseic acid, 6'-hydroxymethyl abscisic acid, beta-hydroxy abscisic acid, beta-methylglutaryl abscisic acid, beta-hydroxy-beta-methylglutarylhydroxy abscisic acid, 4'-desoxy ab-

15. A method according to claim 1, whereby the anti-auxin is PCIB at a concentration between 1 and 50 μM .

5 16. A method according to claim 1, whereby the conifer is a member of the Pinaceae.

17. A method according to claim 1, whereby the conifer is selected from the genera *Pinus*, *Picea*, *Abies*, *Larix*, and *Pseudotsuga*.

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18. A method according to claim 1, whereby the conifer is an *Abies sp* such as *Abies nordmanniana*.

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19. A method according to claim 1, whereby the conifer is a *Picea sp* such as *Picea abies* or *Picea sitchensis*.

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20. A method according to claim 1, whereby the conifer is an *Abies sp* such as *Abies nordmanniana* and the anti-auxin is PCIB at a concentration between 1 and 100 μM .

21. A method according to claim 1, whereby the conifer is a *Picea sp* and the anti-auxin is PCIB at a concentration between 0.1 and 50 μM .

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22. A method according to claim 3, whereby the culture medium used during at least part of the third step after the anti-auxin step further comprises an auxin.

23. A method according to claim 22, whereby the concentration of the auxin in the culture medium is between 0.001 and 100 μM .

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24. A method according to claim 22 or 23, whereby the auxin is selected from the group comprising indole acetic acid, indolebutyric acid, naphthalene acetic acid, 2,4-D, 2-naphthyloxyacetic acid (NOA), 4-chlorophenoxyacetic acid (4-CPA), 2-methyl-4-chlorophenoxyacetic acid (MCPA), 2,4,5-trichlorophenoxyacetic acid (2,4,5-T), 3,6-dichloroanisic acid (dicamba), 4-amino-3,5,5-trichloropicolinic acid (picloram), othonil, 2-chloro-3(2,3-dichloro-phenyl)-propionitril (CDPPN),

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